

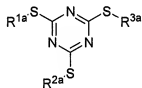
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

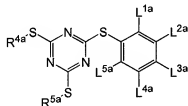
1. (currently amended): An optical material comprising a matrix formed of a polymer and at least a compound selected from a group denoted by a formula (1a) or formula (2a);

Formula (1a)



wherein R^{1a}, R^{2a} and R^{3a} respectively denote ~~an optionally a non-~~an optionally a non-substituted alkyl group or a halogenated alkyl group;

Formula (2a);



wherein R^{4a} and R^{5a} respectively denote an optionally substituted alkyl group; and L^{1a}, L^{2a}, L^{3a}, L^{4a} and L^{5a} respectively denote a hydrogen atom, a halogen atom, an optionally substituted alkyl group, an optionally substituted alkoxy group or an optionally substituted alkylthio group provided that at least two of L^{1a}, L^{2a}, L^{3a}, L^{4a} and L^{5a} denote a halogen atom, an

optionally substituted alkyl group, an optionally substituted alkoxy group or an optionally substituted alkylthio group, and that none of R^{4a}, R^{5a}, L^{1a}, L^{2a}, L^{3a}, L^{4a} and L^{5a} has any polymerizable group.

2. (currently amended): The optical material of claim 1 wherein the compound denoted by the formula (1a) or the formula (2a) ~~having~~has at least one fluorine atom.

3. (currently amended): ~~The~~ A plastic optical fiber comprising the optical material of claim 1 ~~used for a plastic optical fiber.~~

4. (original): A polymerizable composition for producing an optical member comprising;

a polymerizable monomer composition and

at least a compound, having a different refractive index from that of the polymerizable monomer composition, which is selected from the group denoted by the formula (1a) or the formula (2a).

5. (original): The polymerizable composition of claim 4 comprising a polymerization initiator.

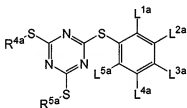
6. (original): An optical member produced by polymerization of a composition of claim 4, to form a region having a graded refractive index.

7. (currently amended): The optical member of claim 6 wherein the region ~~having~~
~~a~~ has the graded refractive index along the direction from the center to the outside.

8. (original): An optical fiber produced by drawing an optical member of claim 6.

9. (currently amended): A compound denoted by a formula (2a);

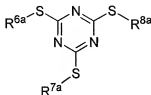
Formula (2a)



wherein R^{4a} and R^{5a} respectively denote an optionally substituted alkyl group; and L^{1a}, L^{2a}, L^{3a}, L^{4a} and L^{5a} respectively denote a hydrogen atom, a halogen atom, an optionally substituted alkyl group, an optionally substituted alkoxy group or an optionally substituted alkylthio group provided that at least two of L^{1a}, L^{2a}, L^{3a}, L^{4a} and L^{5a} denote a halogen atom, an optionally substituted alkyl group, an optionally substituted alkoxy group or an optionally substituted alkylthio group, and that none of R^{4a}, R^{5a}, L^{1a}, L^{2a}, L^{3a}, L^{4a} and L^{5a} has any polymerizable group.

10. (currently amended): A compound denoted by a formula (3a);

Formula (3a)

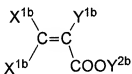


wherein R^{6a}, R^{7a} and R^{8a} respectively denote ~~an optionally a~~ non-substituted branched alkyl group or a halogenated branched alkyl group.

11. (currently amended): A polymerizable composition for producing an optical member comprising;

a polymerizable monomer composition comprising at least one polymerizable monomer denoted by a formula (1b);

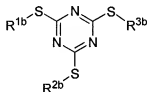
Formula (1b)



wherein X^{1b} is hydrogen (H) or deuterium (D) and two X^{1b}s may be same or different each other; Y^{1b} is H, D, fluorine (F) CH₃, CD₃ or CF₃; and Y^{2b} is a substituted or non-substituted C1-7 alkyl group provided that Y^{2b} is a fluorine-containing C1-7 alkyl group substituted with 1 to 15 fluorine atoms when Y^{1b} is H, D, CH₃ or CD₃;
a polymerization initiator and

a compound, having a different refractive index from that of the polymerizable monomer composition, denoted by a formula (2b);

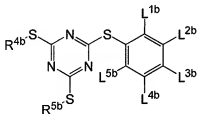
Formula (2b)



wherein R^{1b} , R^{2b} and R^{3b} respectively denote an ~~optionally~~ a non-substituted alkyl group or a halogenated alkyl group-substituted-aryl-group provided that all of R^{1b} , R^{2b} and R^{3b} ~~aren't simultaneously optionally substituted aryl groups.~~

12. (currently amended): The polymerizable composition of claim 11 wherein the compound having a different refractive index from that of the polymerizable composition is selected ~~from~~ from the group denoted by a formula (3b);

Formula (3b)



wherein R^{4b} and R^{5b} respectively denote an optionally substituted alkyl group, L^{1b} , L^{2b} , L^{3b} , L^{4b} and L^{5b} respectively denote a hydrogen atom, a halogen atom, an optionally substituted alkyl group, an optionally substituted alkoxy group or an optionally substituted alkylthio group provided that at least two of them denote respectively a halogen atom, an

optionally substituted alkyl group, an optionally substituted alkoxy group or an optionally substituted alkylthio group, and that none of R^{4b}, R^{5b}, L^{1b}, L^{2b}, L^{3b}, L^{4b} and L^{5b} has any polymerizable group.

13. (original): The polymerizable composition of claim 11 wherein the polymerizable monomer composition contains 5 to 100 weight % of the polymerizable monomer denoted by the formula (1b).

14. (original): The polymerizable composition of claim 11 wherein the polymerizable monomer denoted by the formula (1b) has at least one C-D bond.

15. (original): The polymerizable composition of claim 11 wherein R^{1b}, R^{2b} and R^{3b} in the formula (2b) respectively denote an alkyl group substituted by at least one fluorine atom.

16. (original): An optical member produced by polymerization of a composition of claim 11, so as to form a region having a graded refractive index.

17. (currently amended): The optical member of claim 16 wherein the region ~~having a~~ has the graded refractive index along the direction from the center to the outside.

18. (original): An optical fiber produced by drawing an optical member of claim

16.